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Page 6**REMARKS**

Claims 1-6, 8-28, 30-37, and 40-50 are pending after entry of this Amendment. In the final Office action dated August 20, 2002, the Examiner indicated that claims 9, 10, and 22-40 are allowable, and that claim 12 is allowable if written in independent form to include all limitations of the claims from which it depends.

Claims 1, 6, 8-10, 12, 14-21, 26-28, 31, 33-37, and 40 are amended. The claim amendments do not raise issues of new matter. The present amendments to claims 6, 8-10, 14-16, 26, 28, 33-35 and 40 are made to set forth the elements of the claim more clearly, and are not made for the purposes of patentability.

Claim 1 is amended to clearly specify that the precursor is held at an elevated temperature which is about 40° C or above. This amendment is not made for the purposes of patentability. Support for this amendment may be found in the specification at page 9, lines 18-20. Claim 1 is also amended to recite that the step of heat-treating occurs under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating. Support for this amendment may be found in the specification at page 13, lines 22-24, and in the Examples, including Example 1 at page 29, lines 7-12. Support?

Claims 17-21 are amended to recite that the step of heat-treating occurs under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating. Support for this amendment may be found in the specification at page 13, lines 22-24, and in the Examples, including Example 1 at page 29, lines 7-12. Claims 17-21 are also amended to recite that heat-treating takes place at a temperature of about 40° C or above for at least 12 hours. Support for this amendment may be found in the specification at page 10, lines 12-15 as amended by the Amendment submitted May 10, 2002; and in the specification at page 9, lines 18-20.

Support for the amendment to claims 12 and 31 may be found in the specification at page 8, lines 16-20.

Support for the amendment to claim 27 may be found in the specification at page 9, lines 18-20.

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Claims 36 and 37 are amended to be written in dependent form, depending from claim 10. As amended, each of claims 36 and 37 include each of the elements recited in the previous version.

New dependent claims 41-50 are added. The new claims do not raise issues of new matter.

Support for new claim 41 may be found in Example 2 of the specification at page 31, lines 6-9. ✓

Support for new claims 42 and 44 may be found in the specification at page 11, lines 20-22, and in Example 2 at page 31, lines 20-24. ✓

Support for new claim 43 may be found in Example 3 of the specification at page 36, lines 5-10. ✓

Support for new claims 45 and 48 may be found in Example 1 of the specification at page 28, lines 7-17. ✓

Support for new claims 46 and 49 may be found in Example 4 of the specification at page 37, line 25 bridging to page 38, line 9. ✓

Support for new claims 47 and 50 may be found in the specification at page 25, lines 14-19 and page 1, lines 10-11. ✓

The present invention includes methods for treating precursors comprising an imageable coating on a substrate, the methods including heat-treating the precursors in such a manner that the removal of moisture from the imageable coating is inhibited. An object of the invention is to provide precursors which are of consistent performance over their entire surface area; see specification at page 6, lines 24-25. Removal of moisture during heat-treatment is accomplished, for example, by wrapping the precursor in a water-impermeable sheet material (page 7, lines 17-21), or by heat-treating in a non-drying environment such as a humidity-controlled oven (page 7, lines 22-24).

Claims 1-6, 8, 11, 13-19 and 21 were rejected under 35 U.S.C. § 102(b) as anticipated by WO 99/21715 of McCullough, *et al.* The Examiner asserts that McCullough reports a method of manufacturing a printing form precursor which comprises a positive-working coating on a substrate, including a heat treatment of the coated substrate to reduce the variation in sensitivity of the coating.

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Claim 1 and independent claims 17-19 and 21 are amended to recite that the step of heat-treating occurs under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating. It is respectfully submitted that McCullough does not disclose a method including a step of heat-treating under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating.

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The Examiner refers to Example 1 of McCullough, which reports a heat treatment for plate samples. In the reported heat treatment, individual plate samples were covered with interleaving and then wrapped in a specified polythene-coated paper. Plate samples were then placed in an oven with fan at 50° C for a period of time from 0 to 12 days.

The present invention is distinguishable from the methods reported in McCullough. The present invention, unlike McCullough, provides methods including a step of heat-treating under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating.

→ but
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doesn't
explain
How!

As described in Examples 1 and 2 of the present specification, precursors were heat-treated under controlled-humidity conditions. See page 30, lines 9-10, and page 31, lines 6-7. Some test precursors were wrapped as described in McCullough (page 30, lines 16-18; page 31, lines 13-14), while others were unwrapped (page 30, line 15; page 31, line 11). At relative humidity of 20% or 25%, edge imperfections were observed for imaging and developing of the test precursors (page 30, lines 19-20; page 31, lines 21-23). At relative humidity of 30% and 35% (page 31, lines 20-21), and 40%, 60%, and 80% (page 30, lines 18-19), no edge effects were observed. No differences were observed between wrapped and unwrapped precursors (page 30, lines 20-22; page 31, lines 23-24).

Therefore, it was concluded by the Applicants that the wrapping step reported by McCullough is insufficient to prevent edge effects at relative humidity of 20% or 25%. Furthermore, the wrapping step of McCullough provides no advantages (i.e., unwrapped test precursors performed as well as wrapped precursors) with respect to edge effects, at relative humidities of 30%, 35%, 40%, 60%, and 80%. Example 1 of McCullough is silent with regards to the relative humidity employed.

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McCullough therefore does not disclose a method of heat-treating under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable

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coating. It is respectfully requested that the rejection of claims 1, 17-19 and 21 over McCullough be withdrawn.

Claims 2-6, 8, 11, and 13-16 depend ultimately from claim 1, and therefore are patentable for at least the same reasons.

Claims 17, 18, 20, and 21 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent 5,667,942 to Nakao, *et al.* Claims 17, 18, 20, and 21 are amended to recite that heat-treating takes place at a temperature of about 40° C or above for at least 12 hours. Nakao neither teaches nor suggests heat-treating at a temperature of about 40° C or above for at least 12 hours. Nakao therefore does not anticipate any of claims 17, 18, 20 and 21. It is respectfully requested that the rejection be withdrawn.

but
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prebate
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over claim
Claims 17, 18, 20, and 21 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent 6,002,108 to Yoshioka. Claims 17, 18, 20, and 21 are amended to recite that heat-treating takes place at a temperature of about 40° C or above for at least 12 hours. Yoshioka neither teaches nor suggests heat-treating at a temperature of about 40° C or above for at least 12 hours. Yoshioka therefore does not anticipate any of claims 17, 18, 20 and 21. It is respectfully requested that the rejection be withdrawn.

Claims 17-19, and 21 were rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent 6,143,471 to Takata, *et al.* in view of Nakao. Claims 17-19 and 21 are amended to recite that heat-treating takes place at a temperature of about 40° C or above for at least 12 hours. Neither Takata nor Nakao teaches nor suggests heat-treating at a temperature of about 40° C or above for at least 12 hours. The combination of Takata with Nakao therefore does not make obvious any of claims 17-19 and 21. It is respectfully requested that the rejection be withdrawn.

Claims 17-19, and 21 were rejected under 35 U.S.C. § 103(a) as obvious over Takata in view of Yoshioka. Claims 17-19 and 21 are amended to recite that heat-treating takes place at a temperature of about 40° C or above for at least 12 hours. Neither Takata nor Yoshioka teaches nor suggests heat-treating at a temperature of about 40° C or above for at least 12 hours. The combination of Takata with Yoshioka therefore does not make obvious any of claims 17-19 and 21. It is respectfully requested that the rejection be withdrawn.

New claims 41-50 depend from allowable claims and recite additional elements. Claims 41-50 are therefore allowable for at least the same reasons as the claims from which they depend.

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CONCLUSION

All pending claims are now in condition for allowance. The issuance of a notice to that effect is respectfully requested.

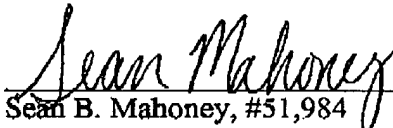
This paper accompanies a Request for Continued Examination. The appropriate fee for the Request for Continued Examination, and a petition and fee for a one-month extension of time, is included. A fee for additional claims is also included. No other fee is believed necessary for entry of this paper. If necessary for the entry of this Amendment, the Commissioner is authorized to credit any overpayment or charge any deficit to our Deposit Account No. 06-0029 and is requested to notify us of the same.

Attached hereto is a marked-up version of the claims reflecting changes made by the present Amendment. The attachment is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE." Attached hereto is also a clean version of all pending claims (including changes made by the present Amendment), for the convenience of the Examiner. The attachment is captioned "PENDING CLAIMS."

Respectfully Submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Three times amended) A method of treating providing a precursor, the precursor comprising a substrate and which comprises an imageable coating on the substrate, the imageable coating comprising a polymeric composition on a substrate, wherein the method comprising the step of heat-treating the precursor ~~comprises a heat treatment step applied to the precursor, the heat treatment step taking place under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating) precursor during the heat treatment, wherein heat-treating includes holding the precursor is held at a an elevated temperature of about 40° C or above for at least 12 hours in the heat treatment.~~
6. (Amended) The method of claim 3, wherein the glass transition temperature of the polymeric composition coating is not exceeded during heat-treating of the precursor in the heat treatment.
8. (Amended) The method of claim 1 5, wherein the step of heat-treating includes holding the precursor is held at a an elevated temperature in the range 40-90° C, for at least 12 hours during the heat treatment.
9. (Three times amended) A method of treating providing a precursor in a precursor coil, the precursor comprising a substrate and which comprises an imageable coating on the substrate, the imageable coating comprising a polymeric composition on a substrate, wherein the method comprising the step of heat-treating the precursor coil comprises a heat treatment step applied to the precursor, the heat treatment step taking place under conditions which inhibit the removal of moisture from the precursor during the heat treatment, wherein the method is applied to a precursor coil.
10. (Three times amended) A method of treating providing a precursor in a stack of precursors, the precursor comprising a substrate and which comprises an imageable coating on the substrate, the imageable coating comprising a polymeric composition on a

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substrate, ~~wherein the method comprising the step of heat-treating the stack of precursors comprises a heat treatment step applied to the precursor, the heat treatment step taking place under conditions which inhibit the removal of moisture from the precursor during the heat treatment, wherein the method is applied to a stack comprises of at least 100 such precursors.~~

12. (Amended) The method of claim 1, wherein the step of heat-treating is carried out ~~removal of moisture is inhibited by carrying out of the heat treatment in an environment having a relative humidity of at least about 25% elevated moisture content.~~ ✓
14. (Amended) The method of claim 1, wherein the imageable said-coating is such that it may be patternwise imaged by direct heat; or by indirect heat from charged particle radiation or electromagnetic radiation, ~~in the latter cases said radiation being converted to heat by the coating.~~
15. (Amended) The method of claim 1, wherein the imageable coating comprises a radiation-absorbing compound able to absorb electromagnetic radiation entirely or predominantly in the range 600 to 1400 nm and convert it to heat.
16. (Twice amended) The method of claim 1 wherein the imageable coating comprises insolubilizer means which acts to inhibit the dissolution of the coating in a developer prior to imaging.
17. (Twice amended) A method for providing a printing form precursor, comprising: (a) providing on a substrate an imageable coating comprising a polymeric composition on a substrate; and (b) heat-treating the imageable coating at a temperature of about 40° C or above for at least 12 hours, applying a heat treatment step to the precursor, the heat treatment step taking place under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating; to provide the printing form precursor during heat treatment.

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18. (Amended) A method for providing an electronic part precursor, comprising: (a) providing on a substrate an imageable coating comprising a polymeric composition on a substrate; and (b) heat-treating the imageable coating at a temperature of about 40° C or above for at least 12 hours, applying a heat treatment step to the precursor, the heat treatment step taking place under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating; to provide the electronic part precursor during heat treatment.
19. (Amended) A positive working lithographic printing form precursor produced by a method comprising: (a) providing on a substrate a positive working an-imageable coating comprising a polymeric composition on a substrate; and (b) heat-treating the imageable coating at a temperature of about 40° C or above for at least 12 hours, applying a heat treatment step to the precursor, the heat treatment step taking place under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating; to provide the printing form precursor during heat treatment.
20. (Amended) An electronic part precursor produced by a method comprising: (a) providing on a substrate an imageable coating comprising a polymeric composition on a substrate; and (b) heat-treating the imageable coating at a temperature of about 40° C or above for at least 12 hours, applying a heat treatment step to the precursor, the heat treatment step taking place under conditions which inhibit the removal of moisture from substantially the entire surface area of the imageable coating; to provide the electronic part precursor precursor during heat treatment.
21. (Amended) A method ~~for~~ of producing an imaged article, comprising:
(a) providing a precursor having an imageable coating on a substrate, the imageable coating including which comprises a polymeric composition; on a substrate;
(b) heat-treating the precursor at a temperature of about 40° C or above for at least 12 hours, wherein heat treatment has been applied to the precursor such that the removal of moisture from substantially the entire surface area of the imageable coating precursor during heat-treating the heat treatment is inhibited;

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(c) ~~(b)~~-imagewise exposing the coating; and

(d) ~~(e)~~-contacting the exposed coating with an aqueous developer, to produce the imaged article.

26. (Amended) The method of claim 23, wherein the glass transition temperature of the polymeric composition coating is not exceeded in the heat treatment.
27. (Amended) The method of claim 10, wherein the step of heat-treating includes holding the stack of precursors precursor is held at a an elevated temperature of about 40° C or above, for at least 12 hours in the heat treatment.
28. (Amended) The method of claim 10 25, wherein the step of heat-treating includes holding the stack of precursors the precursor is held at a an elevated temperature in the range 40-90° C during the heat treatment.
31. (Amended) The method of claim 10, wherein the step of heat-treating is carried out removal of moisture is inhibited by carrying out of the heat treatment in an environment having a relative humidity of at least about 25% elevated moisture content.
33. (Amended) The method of claim 10, wherein the imageable said-coating is such that it may be patternwise imaged by direct heat; or by indirect heat from charged particle radiation or electromagnetic radiation, in the latter cases said radiation being converted to heat by the coating.
34. (Amended) The method of claim 10, wherein the imageable coating comprises a radiation-absorbing compound able to absorb electromagnetic radiation entirely or predominantly in the range 600 to 1400 nm and convert it to heat.
35. (Amended) The method of claim 10 wherein the imageable coating comprises insolubilizer means which acts to inhibit the dissolution of the coating in a developer prior to imaging.

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36. (Amended) The method of claim 10, wherein the precursor is A method for providing a printing form precursor, comprising: (a) providing an imageable coating comprising a polymeric composition on a substrate; and (b) applying a heat treatment step to the precursor, the heat treatment step taking place under conditions which inhibit the removal of moisture from the precursor during heat treatment, wherein the method is applied to a stack of at least 100 precursors.
37. (Amended) The method of claim 10, wherein the precursor is A method for providing an electronic part precursor, comprising: (a) providing an imageable coating comprising a polymeric composition on a substrate; and (b) applying a heat treatment step to the precursor, the heat treatment step taking place under conditions which inhibit the removal of moisture from the precursor during heat treatment, wherein the method is applied to a stack of at least 100 precursors.
40. (Amended) A method for ~~of~~ producing an imaged article, comprising:
- (a) providing a precursor having an imageable coating on a substrate, the imageable coating comprising which comprises a polymeric composition; on a substrate;
 - (b) heat-treating the precursor among a stack of at least 100 such precursors, ~~wherein heat treatment has been applied to the precursor such that the removal of moisture from the precursor during the heat treatment is inhibited;~~
 - (b) imagewise exposing the imageable coating; and
 - (c) contacting the exposed imageable coating with an aqueous developer, to produce the imaged article wherein the method is applied to a stack of at least 100 precursors.

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